

10/587548

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

MPEP 1449

10/587548
36969US2

TBD

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 1 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	4,510,188	4/1985	Ruggeri			
	B	4,642,250	2/1987	Spector			
	C	4,747,413	5/1988	Bloch			
	D	5,061,553	10/1991	Olsen, Jr.			
	E	5,161,479	11/1992	Mahr			
	F	5,360,503	11/1994	Coffy			
	G	5,376,699	12/1994	Sage			
	H	5,453,863	9/1995	West et al.			
	I	5,981,408	11/1999	Nakagawa et al.			
	J	6,072,619	6/2000	Kiryushev et al.			
	K	6,096,666	8/2000	Jachimowicz et al.			
	L	6,270,783	8/2001	Slavtcheff et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M	92/11311	7/1992	WO			
	N	2005/072455	8/2005	WO			
	P	2005/081779	9/2005	WO			

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	Reflective display with photoconductive layer and a bistable reflective cholesteric mixture, Hidefumi Yoshida et al., Journal of the SID 5/3, 1997, pp. 269-274.
	R	Photostable tilted-perpendicular alignment of liquid crystals for light valves, Anna Lackner et al., Proceedings of the SID, Vol. 31/4, 1990, pp. 321-326.

Examiner: /Nitin Patel/ Date Considered 08/03/2009

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NP/

10/587548

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEAPR 11 Rec'd PCT/BTO 88 JUL 2006
36969US2 | TBDINFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 2 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	6,277,439	8/2001	Painter			
	B	6,603,259	8/2003	Kiryushev et al.			
	C	6,608,438	8/2003	Topelberg et al.			
	D	6,624,565	9/2003	Topelberg			
	E	6,654,080	11/2003	Khan et al.			
	F	6,697,191	2/2004	Kiryushev et al.			
	G	6,727,197	4/2004	Wilson et al.			
	H	6,788,362	9/2004	Stephenson et al.			
	I	2005/0007336	1/2005	Albert et al.			
	J	2003/0202136	10/2003	Stephenson et al.			
	K	2004/0032545	2/2004	Stephenson et al.			
	L	2003/0016329	1/2003	Smith et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>Transparent phase images in photoactivated liquid crystals</i> , J.S. Margerum et al., Applied Physics Letter, Volume 19, Number 7, October 1, 1971, pp. 216-218.
	R	<i>16.3: Development of a flexible electronic display using photographic technology</i> , Stanley W. Stephenson et al., SID 04 Digest, pp. 774-777.

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NP/

10/587548

IAPU Rec'D PCT/P10 28 JUL 2006

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTN DOCKET NO.

SERIAL NO.

36969US2

TBD

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 3 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	2003/0117548	6/2003	Stephenson			
	B	2003/0034945	2/2003	Mi et al.			
	C	2003/0019575	1/2003	Smith et al.			
	D	2003/0206147	11/2003	Mi et al.			
	E	3,600,060	8/1971	Churchhill			
	F	4,684,771	8/1987	Wuthrich			
	G	4,688,900	8/1987	Doane et al.			
	H	6,271,898	8/2001	Clikeman et al.			
	I	6,423,368	7/2002	Stephenson et al.			
	J	6,459,467	10/2002	Hashimoto et al.			
	K	4,890,902	1/1990	Doane et al.			
	L	6,061,107	5/2000	Yang et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>A fully flexible colour display</i> , Peter Slikkerveer et al., SID 04 Digest, pp. 770-773.
	R	<i>Robust Flexible LCD's with Paintable Technology</i> , Joost P.A. Vogels et al., SID 04 Digest, pp. 767-769.

Examiner: /Nitin Patel/ Date Considered 08/03/2009

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NP/

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)			APPLICANT: J. William Doane et al.	
			FILING DATE: Herewith	GROUP ART UNIT: TBD
Page 4 of 12				

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	6,359,673	3/2002	Stephenson			
	B	6,423,368	7/2002	Stephenson et al.			
	C	6,433,849	8/2002	Lowe			
	D	6,556,262	4/2003	Stephenson et al.			
	E	6,585,849	7/2003	Smith et al.			
	F	6,618,114	9/2003	Freeman			
	G	3,680,950	8/1972	Haas et al.			
	H	5,437,811	8/1995	Doane et al.			
	I	5,200,845	4/1993	Crooker et al.			
	J	5,644,330	7/1997	Catchpole et al.			
	K	5,748,277	5/1998	Huang et al.			
	L	5,668,614	9/1997	Chien et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	10.1: Invited paper: What is electronic paper? The expectations, Makoto Omodani, SID 04 Digest, pp. 128-131.
	R	Effect of woven fabric anisotropy on drape behaviour, V. Sidabraite et al., ISSN 1392-1320, Materials Science, Vol. 9, No. 1, 2003, pp. 111-115.
Examiner:	/Nitin Patel/	Date Considered 08/03/2009

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)			APPLICANT: J. William Doane et al.	
			FILING DATE: Herewith	GROUP ART UNIT: TBD
Page 5 of 12				

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	5,493,430	2/1996	Lu et al.			
	B	6,359,673	3/2002	Stephenson			
	C	6,377,321	4/2002	Khan et al.			
	D	6,483,563	11/2002	Khan et al.			
	E	6,532,052	3/2003	Khan et al.			
	F	5,847,798	12/1998	Yang et al.			
	G	6,320,563	11/2001	Yang et al.			
	H	6,154,190	11/2000	Yang et al.			
	I	6,133,895	10/2000	Huang			
	J	6,034,752	3/2000	Khan et al.			
	K	2002/0030786	4/2002	Stephenson			
	L	2003/0085380	5/2003	Schumacher et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>The characterization of the static and dynamic drape of fabrics</i> , G.K. Stylios et al., J. Text. Inst., 1997, 88 Part 1, No. 4, pp. 465-475.
	R	<i>Modelling the fused panel for a numerical simulation of drape</i> , Simona Jevsnik et al., Fibers & Textiles in Eastern Europe, January/March 2004, Vol. 12, No. 1, pages 47-52.

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/587548

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

PART I Rec'd PTO-1449 JUL 2005

APPY. DOCKET NO.
36969US2SERIAL NO.
TBDINFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 6 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	2003/0063245	4/2003	Bowley et al.			
	B	2005/0083284	4/2005	Huang et al.			
	C	2003/0071791	4/2003	Hanson et al.			
	D	5,691,795	11/1997	Doane et al.			
	E	2003/0155151	8/2003	Hermanns et al.			
	F	6,468,638	10/2002	Jacobsen et al.			
	G	6,316,278	11/2001	Jacobsen et al.			
	H	5,007,872	4/1991	Tang			
	I	4,362,903	12/1982	Eichelberger et al.			
	J	4,896,946	1/1990	Suzuki et al.			
	K	5,889,572	3/1999	Takahashi et al.			
	L	4,948,232	8/1990	Lange			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>Mechanics of elastic performance of textile materials</i> , Chauncey Chu et al., Textile Research Journal, August 1950, pp. 539-548.
	R	<i>The dependence of fabric drape on bending and shear stiffness</i> , G.E. Cusick, J. Textile Institute 36, 11, 1965, pp. T597-T-607.

Examiner: /Nitin Patel/ Date Considered

08/03/2009

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NP/

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)			APPLICANT: J. William Doane et al.	
			FILING DATE: Herewith	GROUP ART UNIT: TBD
Page 7 of 12				

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	5,751,257	5/1998	Sutherland			
	B	6,710,760	3/2004	Johnson et al.			
	C	6,253,190	6/2001	Sutherland			
	D	6,269,342	7/2001	Brick et al.			
	E	6,657,620	12/2003	Oishi et al.			
	F	5,734,155	3/1998	Rostoker			
	G	2003/0169221	9/2003	Stephenson et al.			
	H	2002/0186182	12/2002	Stephenson et al.			
	I	2003/0222139	12/2003	Stephenson et al.			
	J	2004/0080477	4/2004	Capurso et al.			
	K	2003/0160912	8/2003	Stephenson			
	L	6,307,605	10/2001	Bailey			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>Liquid crystal dispersions</i> , Paul S. Drzaic, World Scientific, Series on Liquid Crystals, Vol. 1, pp. xi-xv, 1995.
	R	<i>6.3: Plastic VGA reflective cholesteric LCDs with dynamic drive</i> , G.M. Podolil et al., SID proceedings, 1998, pp. 51-54.

Examiner: /Nitin Patel/ Date Considered 08/03/2009

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 8 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	6,902,454	6/2005	Petruchik			
	B	6,655,788	12/2003	Freeman			
	C	6,224,964	5/2001	Kawai et al.			
	D	6,268,839	7/2001	Yang et al.			
	E	2002/0030776	3/2002	Khan et al.			
	F	6,452,590	9/2002	Awamoto et al.			
	G	6,628,256	9/2003	Nishimura			
	H	2001/0015712	8/2001	Hashimoto			
	I	2003/0184569	10/2003	Koga et al.			
	J	5,815,136	9/1998	Ikeda et al.			
	K	6,278,429	8/2001	Ruth et al.			
	L	5,530,457	6/1996	Helgeson			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	13.1: Invited Paper: Reflective color display using cholesteric liquid crystals, K. Hashimoto et al., SID 98 Digest, pp. 897-900.
	R	Black and white photo-addressable electronic paper using encapsulated cholester liquid crystal and organic photoconductor, T. Kakinuma et al., IDW 2002, pp. 1345-1348.

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/587548
IAP11 Rec'd PCT/PTO 28 JUL 2006

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)			APPLICANT: J. William Doane et al.	
			FILING DATE: Herewith	GROUP ART UNIT: TBD
Page 9 of 12				

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	6,268,841	7/2001	Cairns et al.			
	B	2003/0011549	1/2003	Murahashi et al.			
	C	5,172,108	12/1992	Wakabayashi et al.			
	D	2003/0031845	2/2003	Umeya et al.			
	E	6,864,435	3/2005	Hermanns et al.			
	F	5,996,897	12/1999	Prancz			
	G	2005/0162606	12/2004	Doane et al.			
	H	5,625,477	4/1997	Wu et al.			
	I	2005/0001797	2/2004	Miller, IV et al.			
	J	5,636,044	6/1997	Yuan et al.			
	K	7,009,666	3/2006	Khan et al.			
	L	6,819,310	11/2004	Huang et al.			

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	M						
	N						
	P						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	Q	<i>Characterization of "Peas in a Pod", a novel idea for electronic paper</i> , S. Maeda et al., IDW 2002, pp. 1353-1356.
	R	<i>Holographic polymer-dispersed liquid crystals (H-PDLCs)</i> , T.J. Bunning et al., Annu. Rev. Mater. Sci 2000, 30:83-115, pp. 83-115.

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/587548

APR 11 REC'D PT O 28 JUL 2006

DOCKET NO.
36969US2SERIAL NO.
TBD

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE CITATION
BY APPLICANT
(USE SEVERAL SHEETS IF NECESSARY)

Page 10 of 12

APPLICANT:
J. William Doane et al.FILING DATE:
HerewithGROUP ART UNIT:
TBD

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A	6,850,217	2/2005	Huang et al.			
	B						
	C						
	D						
	E						
	F						
	G						
	H						
	I						

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	J						
	K						
	L						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	M	Reflective multicolor display using cholesteric liquid crystals, M. Okada et al., Proc, SID 97 Digest, pp. 1019-1022.
	N	Multiple color high resolution reflective cholesteric liquid crystal display, D. Davis et al., Proc IDRC (242) 1997.
	P	Full color (4096 Colors) reflective cholesteric crystal display, X. Huang et al., Proceedings of Asia Display 98, pp. 883-886 (1998).

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/587548
IAP11 Rec'd PCT/PTO 28 JUL 2006

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT <i>(USE SEVERAL SHEETS IF NECESSARY)</i>			APPLICANT: J. William Doane et al.	
			FILING DATE: Herewith	GROUP ART UNIT: TBD
Page 11 of 12				

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A						
	B						
	C						
	D						
	E						
	F						
	G						
	H						
	I						

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	J						
	K						
	L						

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	M	Jing-Jou Tang et al., <i>A 30-V Row/Column Driver for PSCT LCD Using High-Voltage BiMOS Process</i> , Online Article, dated 1999.
	N	http://www/us.semiconductors.philips.com/pip/PCF8578.html , LCD/row/column driver for dot matrix graphic displays, printed July 8, 2003, pp. 1-3.
	P	40CH Segment/Driver for Dot Matrix LCD, KS0065B, Samsung Electronics, 12 pages.

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

10/587548

IAP11 Rec'd PCT/PTO 28 JUL 2006

Form PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 36969US2	SERIAL NO. TBD
INFORMATION DISCLOSURE CITATION BY APPLICANT <i>(USE SEVERAL SHEETS IF NECESSARY)</i>		APPLICANT: J. William Doane et al.		
Page 12 of 12		FILING DATE: Herewith	GROUP ART UNIT: TBD	

U.S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass	Filing Date
	A						
	B						
	C						
	D						
	E						
	F						
	G						
	H						
	I						

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	J						
	K						
	L						

OTHER REFERENCES (*Including Author, Title, Date, Pertinent Pages, Etc.*)

M	Doane, J. William and Khan, Asad; <u>Cholesteric Liquid Crystals for Flexible Displays</u> , in <i>Flexible Flat Panel Displays</i> , Ed. G. Crawford) John Wiley & Sons, England, Chapter 17 (2005) pgs. 331-354
N	Doane, J. William, " <u>Polymer Dispersed Liquid Crystal Displays</u> ", in <i>Liquid Crystals: Applications & Uses</i> , Ed. Birendra Bahadur (World Scientific Pub. 1990), Chapter 14, pgs 361-395
P	Luo, F.C., " <u>Active Matrix LC Displays</u> ", in <i>Liquid Crystals: Applications & Uses</i> , (ed. B. Bahadur), World Scientific, Singapore, Chapter 15, pgs. 397-436.
Q	

Examiner:	/Nitin Patel/	Date Considered	08/03/2009
-----------	---------------	-----------------	------------

*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /NP/